

REMARKS

Claims 21-40 are presently pending in the Application and the Examiner has stated that claims 37-40 are objected to as dependent from a rejected base claim, but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims, for which the Applicant respectfully thanks the Examiner.

In response, the Applicant has rewritten claims 37 and 39 in independent form including all recitations and limitations of base claim 21 so that claims 37 and 39 are now in allowable form, and has amended claims 38 and 40 to be respectively dependent from claims 37 and 39 so that claims 38 and 40 are now dependent from allowable base claims. The Applicant, therefore, respectfully requests that the Examiner reconsider and withdraw all objections to claims 37-40 and the allowance of claims 37-40 as presented herein above.

The Examiner has rejected claims 21-27, 30, 31, 33, 35 and 36 under 35 U.S.C. § 102 over Mokadam '866 and, again under 35 U.S.C. § 102, over Burnett '834. The Examiner has also rejected claims 28, 29 and 34 under 35 U.S.C. § 103 over Mokadam '866 or Burnett '834 and claim 32 under 35 U.S.C. § 103 over Mokadam '866 or Burnett '834 in view of Kahn 444.

As review of the claims shows that claims 21, 32 and 33 are independent claims and that all others of the claims rejected under 35 U.S.C. § 103 are directly or indirectly dependent from one of claims 21, 32 or 33 and thereby incorporate all recitations and limitations of claims 21, 32 or 33.

After review of claims 21, 32 and 33 in light of the cited prior art, the Applicant has herein above amended claims 21, 32 and 33 to more clearly and explicitly recite the distinctions by which claims 21-27, 30, 31, 32, 33, 35 and 36 are patentably distinguished over and from the teachings of Mokadam '866, Burnett '834 and Kahn 444 and the combinations thereof under the requirements and provisions of 35 U.S.C. § 102 and 35 U.S.C. § 103. It will be noted that these amendments are fully supported by the specification, drawings and claims

as originally filed, and that the amendments have not added any new matter to or altered the subject matter or scope of the invention, the specification or the claims.

In particular, claims 21, 32 and 33 have been amended to explicitly recite that the system and method of the present invention employ only a single first heat exchanger and only a single second heat exchanger and that the heat exchangers and the mixture flow paths between the heat exchangers are thermally isolated from one another. All transfers of heat to and from the mixture thereby occur only in the heat exchangers, that is, there is no heat exchange between the flows of mixture between the heat exchangers.

The present invention as recited in amended claims 21, 32 and 33 and thereby in the claims dependent therefrom is fundamentally distinguished over and from the teachings and suggestions of Mokadam '866 because Mokadam '866 expressly and explicitly requires a heat exchanger between the mixture flowing from the first heat exchanger to the second heat exchanger and the mixture flowing from the second heat exchanger to the first heat exchanger to achieve a required regenerative transfer of heat energy between the fluid flows between the heat exchangers. The present invention as recited in claims 21, 32 and 33, however, and thereby in the dependent claims, expressly excludes any form of heat exchange between the mixture flows between the heat exchangers as the method and apparatus of the present invention do not require and do not employ any form of regenerative heat transfers. The present invention as recited in claims 21, 32 and 33 and the dependent claims is thereby not only thereby fundamentally distinguished over and from teachings of Mokadam '866, but the teachings of Mokadam '866 are actually contrary to the present invention and Mokadam '866, in fact, teaches away from the present invention.

In a similar manner the present invention as recited in amended claims 21, 32 and 33 and thereby in the claims dependent therefrom is fundamentally distinguished over and from the teachings and suggestions of Burnett '834 because Burnett '834 expressly and explicitly

requires the use of multiple, cascaded pairs of heat exchangers in order to obtain the desired degree of heating or cooling. The present invention as recited in claims 21, 32 and 33, however, and thereby in the dependent claims, expressly and explicitly requires the use of a single first heat exchanger and a single second heat exchanger and thereby expressly excludes the use of multiple pairs of cascaded heat exchangers. The present invention as recited in claims 21, 32 and 33 and the dependent claims is thereby not only fundamentally distinguished over and from teachings of Burnett '834, but the teachings of Burnett '834 are actually contrary to the present invention and Burnett '834, in fact, teaches away from the present invention.

It is, therefore, the Applicant's belief and position that for the reasons discussed above the present invention as recited in claims 21-27, 30, 31, 32, 33, 35 and 36 as amended herein above are fully and patentably distinguished over and from the teachings of Mokadam '866, Burnett '834 and Kahn 444 and all combinations thereof under the requirements and provisions of 35 U.S.C. § 102 and 35 U.S.C. § 103. The Applicant accordingly respectfully requests that the Examiner reconsider and withdraw all rejections over the prior art of claims 21-27, 30, 31, 32, 33, 35 and 36 as amended herein above, and the allowance of claims 21-27, 30, 31, 32, 33, 35 and 36 as presented herein above.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Mokadam '866, Burnett '834 and Kahn 444 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such

teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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